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Measuring the labour contribution of unpaid care in the Labour Account

Update on estimating unpaid care in the Labour Account

Released 29/11/2024

Source: [Labour Account Australia, June 2024](#)

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Feedback

Public consultation

The ABS welcomes all feedback on the current approach to measuring the labour contribution of unpaid care in Australia.

A [public consultation \(https://consult.abs.gov.au/labour-statistics/unpaid-care-consultation/\)](https://consult.abs.gov.au/labour-statistics/unpaid-care-consultation/) process will be open from 29 November 2024 to 28 February 2025. Feedback received will be used to guide the development and refinement of more detailed experimental estimates to be published in mid-2025.

Overview

In September 2023, the Australian government released [Working Future: The Australian Government's White Paper on Jobs and Opportunity \(https://treasury.gov.au/employment-whitepaper/final-report\)](https://treasury.gov.au/employment-whitepaper/final-report). This paper highlighted gaps in labour market data on unpaid care that, if addressed, would strengthen evidence-based policy decisions.

The ABS has been funded to expand the [Labour Account \(https://www.abs.gov.au/statistics/labour/labour-accounts/labour-account-australia/latest-release\)](https://www.abs.gov.au/statistics/labour/labour-accounts/labour-account-australia/latest-release) to improve estimates on the total hours spent on unpaid care and their monetary value. These new measures will improve the visibility of the contribution of unpaid care to society and the economy, alongside the extensive information on paid work.

This information paper presents early experimental estimates of unpaid childcare in Australia for June quarter 2021, based on initial work on concepts and methods, along with information on further plans and future directions.

A range of valuations are presented using different estimation methods, including the relative strengths and limitations of each method. The measurement of unpaid care is an emerging area internationally, which the ABS is a part of, and the approach is expected to evolve over time.

This work is part of a broader suite of investment in addressing priority labour market data gaps. Further information is available in [Labour Statistics recent and upcoming developments \(https://www.abs.gov.au/statistics/understanding-statistics/guide-labour-statistics/labour-statistics-recent-and-upcoming-developments\)](https://www.abs.gov.au/statistics/understanding-statistics/guide-labour-statistics/labour-statistics-recent-and-upcoming-developments).

Definitions and scope

Domestic and international guidelines

Internationally, there isn't a single definition of unpaid care. Aggregate labour statistics on the topic are relatively new, and the underpinning concepts and methods are still developing. There is a growing awareness of the need to produce unpaid care data and recognise the contribution of this work to the broader economy and society, alongside the extensive information on paid work.

Current work to develop measures of unpaid care builds on previous work by the ABS and others. In 1992 (<https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/04B6E98636D421E6CA25722E001A7F7D?opendocument>) and 1997 (<https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/5240.0Media%20Release11997?opendocument&tabname=Summary&prodno=5240.0&issue=1997&num=&view=>), the ABS released experimental estimates measuring all unpaid work, primarily completed in the household. In 2021, the ABS published information around the scope of unpaid work in relation to the [Australian System of National Accounts \(https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/australian-system-national-accounts-concepts-sources-and-methods/2020-21/chapter-23-satellite-accounts/household-satellite-account-and-unpaid-work/unpaid-work\)](https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/australian-system-national-accounts-concepts-sources-and-methods/2020-21/chapter-23-satellite-accounts/household-satellite-account-and-unpaid-work/unpaid-work). This highlighted that, while most unpaid work is not within scope of more narrow traditional economic measures, when a broader view of economic activity is applied to include all labour input then unpaid work should be considered.

The measurement work summarised in this information paper currently focuses on the labour contribution of unpaid care, a large component of all unpaid work.

This work will draw on and contribute towards developments on measuring unpaid care across the international statistical community.

Framework for measuring unpaid care

Definitions of unpaid care and care work have been developed based on concepts recently laid out in the Statistics Canada [Care Economy Conceptual Framework \(https://www150.statcan.gc.ca/n1/pub/89-652-x/89-652-x2023002-eng.htm\)](https://www150.statcan.gc.ca/n1/pub/89-652-x/89-652-x2023002-eng.htm), which in turn draws on a range of international research.

Care work is defined as activities and responsibilities involved in meeting the physical, psychological and emotional needs of care-dependent people.

Care-dependent people are those that require care to live independently due to functional limitations. These limitations may be due to age, such as young children or the elderly, or they may be due to a long-term health condition or disability.

Summary of care definitions used in this work

Concept	Definition	Examples
Care work	Activities and responsibilities involved in meeting the physical, psychological and emotional needs of care-dependent people	<ul style="list-style-type: none"> Physical and emotional care Food preparation Associated travel
Care-dependent	Requiring care to live independently due to functional limitations	<ul style="list-style-type: none"> Children (due to young age) Elderly (due to old age) Adults with long term health conditions or disability

The Framework classifies care given as childcare or adult care. Childcare is care given to people under 15, while adult care is care given to people 15 and over. The cut off point of 15 years has been chosen to differentiate the level of care needed for young children compared to older children who are generally more self-sufficient.

All care activities are classed as either direct or indirect care.

- Direct care involves hands-on or face-to-face tasks, such as feeding or bathing.
- Indirect care provides the pre-conditions required for direct care, such as preparing food or transportation.

While this work focuses on estimating the labour contribution of unpaid care, often provided by relatives or friends, it is important to note that care work can also be paid.

Relationship with existing ABS definitions

The definition of care work adopted in this paper extends the definition of a carer used in other ABS statistics, including those based on the [Survey of Disability, Ageing and Carers \(SDAC\)](https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release) and the [Census of Population and Housing](https://www.abs.gov.au/census) (the Census). In SDAC, a carer is a person who provides informal assistance (help or supervision) to people with disability or older people (aged 65 years and over). Using these existing definitions would therefore not account for the labour contribution of unpaid care provided to children without a disability.

Feedback

Approach to populating the framework

As measuring unpaid care in labour statistics is still an emerging measurement frontier, the ABS is working on a staged approach to developing unpaid care estimates. The ABS will expand and build upon these estimates as frameworks and measurement approaches are further defined and adopted by the international statistical community.

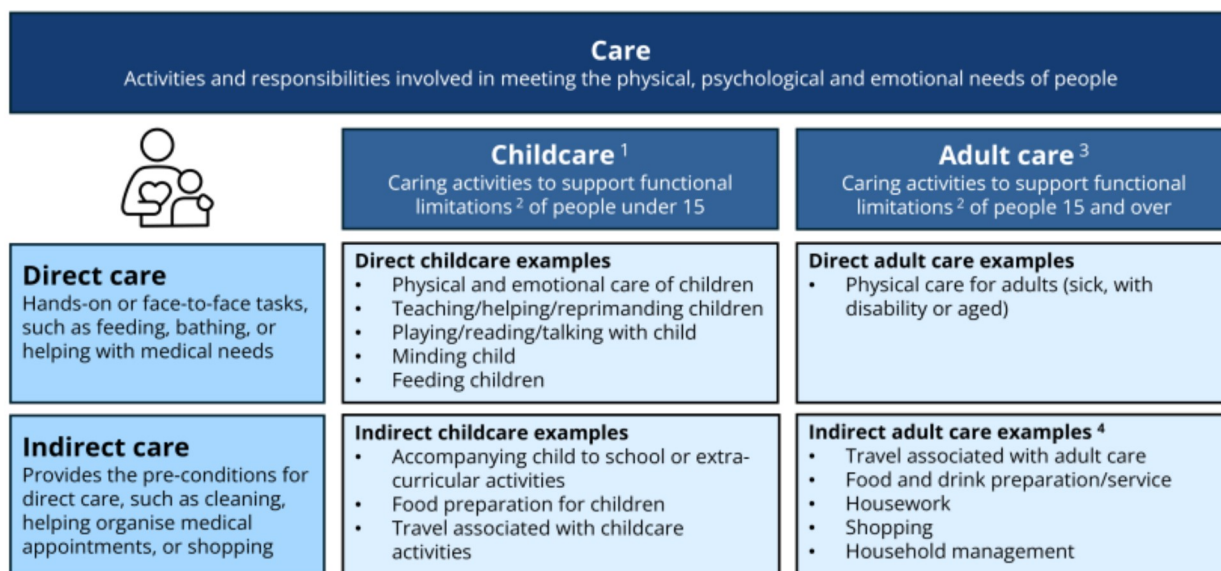
For these initial experimental estimates, unpaid childcare will be the focus of initial measurement effort, followed by an expansion to include unpaid care for adults in mid-2025. The ABS is continuing to consider the best approach to estimating adult care as there are less distinct adult care activities in existing data sources, particularly for indirect adult care.

However, given childcare makes up the majority of unpaid care, ongoing investigations into how to best measure adult care is likely to have a relatively small impact on the overall estimates.

Volunteering, housework and other unpaid work are outside scope of current work, however, represent potential future extensions.

The diagram below shows the overall framework and describes the next steps for our development.

Framework for measuring care



¹ Experimental childcare estimates are published in this paper

² Functional limitations may be due to health problems, disability or age (children or elderly)

³ Experimental adult care estimates are in development for release in mid-2025

⁴ Indirect adult care examples refer to activities provided for care-dependent adults only

Measurement approaches

Internationally, there are a variety of approaches to valuing unpaid care activities. An important concept to valuing unpaid care is whether the caring activity could have been replaced by a third party paid service. This is called the 'third party criterion' and helps to determine whether an action is contributing to production within the economy.

All caring activities need to fit this criterion. For example, preparing food for a child could be replaced by purchasing pre-prepared food.

Examples of activities that do not fit the third party criterion include watching television and personal care activities (such as self-grooming and dressing). These activities cannot be undertaken on behalf of another individual.

The labour contribution of unpaid care is estimated by assigning a value of the time spent on these activities in the following way:

$$[\text{Value of unpaid care}] = [\text{Hours spent on unpaid care}] \times [\text{Applicable wage rate}]$$

The estimates in this paper use hours spent on unpaid care activities from the [Time Use Survey \(https://www.abs.gov.au/statistics/people/people-and-communities/how-australians-use-their-time/2020-21\)](https://www.abs.gov.au/statistics/people/people-and-communities/how-australians-use-their-time/2020-21) and wages data from the [Survey of Employee Earnings and Hours \(https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/employee-earnings-and-hours-australia/may-2021\)](https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/employee-earnings-and-hours-australia/may-2021).

Data has been produced using four valuation methods:

- Individual function replacement cost method
- Minimum wage replacement cost method
- Housekeeper wage replacement cost method
- Opportunity cost method

These methods provide low, middle and high range estimates.

Replacement cost method

The replacement cost approach values unpaid care at the cost to hire a replacement service. Three of the estimation methods use this approach - Individual function, Minimum wage and Housekeeper wage.

Individual function replacement cost method – Considered to be the most useful approach

The Individual function method matches specific childcare activities to their equivalent [occupations \(https://www.abs.gov.au/statistics/classifications/anzsco-australian-and-new-zealand-standard-classification-occupations/latest-release\)](https://www.abs.gov.au/statistics/classifications/anzsco-australian-and-new-zealand-standard-classification-occupations/latest-release) and applies a wage rate to unpaid childcare hours based on a comparable matched occupation. For example, hours spent minding a child are valued using the wage rate of a child carer, whereas hours spent on food preparation for children use the wage rate of a kitchenhand.

The ABS recommends use of the Individual function method for the best estimates of unpaid childcare as it most accurately estimates the market cost of employing someone to complete caring activities on a paid basis.

Under this method, occupations need to be chosen based on a best fit for each activity. However, in most cases, the activity is being performed by an unpaid carer without formal qualification or experience in the area. It is also not possible to account for differences in the quality of care provided when applying a wage rate, and this method therefore inherently assumes market replacements and householders deliver comparable quality of care (rather than a higher quality of care by some and lower by others).

Minimum wage and Housekeeper wage replacement cost methods

The Minimum wage and Housekeeper wage methods both apply a single wage rate to all unpaid care hours. For the Minimum wage method, this is the national minimum wage set by the Fair Work Commission at the time the care activity was provided. For the Housekeeper wage method, it is the average wage rate of a housekeeper at that time.

The Housekeeper wage method was used in past experimental ABS releases measuring unpaid work, rather than unpaid care, in 1992 (<https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/04B6E98636D421E6CA25722E001A7F7D?opendocument>) and 1997 (<https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/5240.0Media%20Release11997?opendocument&tabname=Summary&prodno=5240.0&issue=1997&num=&view=>). Both the Minimum wage and Housekeeper wage methods produce lower bound estimates, as these wages rates are typically below the overall average.

Opportunity cost method

The Opportunity cost method assumes that when unpaid care is provided, the carer has forgone the chance to undertake paid work at that time. The wage rate of the usual occupation of the unpaid carer is applied to the hours spent on unpaid care activities.

If the unpaid carer is unemployed or not in the labour force, an average wage rate is applied.

The Opportunity cost method does not account for the fact that unpaid care may be performed outside of usual working hours, on days where the carer is not working, or at times when paid work is not available. It also implies that an hour spent looking after a child is more valuable when carried out by someone in a higher paying occupation, despite the care activities being the same.

The Opportunity cost method is skewed by people working in higher paying or specialised occupations and therefore produces much higher range estimates. For these reasons, the ABS recommends caution when using estimates from the Opportunity cost method.

Summary of methods

Care valuation	Description	Examples
Individual function replacement cost	Applies the wage rate of the equivalent occupation matched to the specific childcare activity	<ul style="list-style-type: none"> • If activity is minding children, value at child carer wage • If activity is food preparation, value at kitchenhand wage
Minimum wage replacement cost	Applies the national minimum wage rate at the time the care activities were provided, to all care activities	<ul style="list-style-type: none"> • Same flat rate for all care activities
Housekeeper wage replacement cost	Applies the average wage rate of a housekeeper to all care activities	<ul style="list-style-type: none"> • Same flat rate for all care activities
Opportunity cost	Applies the wage rate of the usual occupation of the unpaid carer	<ul style="list-style-type: none"> • If carer is an electrician, value care at electrician wage • If carer is a solicitor, value care at solicitor wage

Sex and age estimates

Estimates of the labour contribution of unpaid childcare by sex and age groups are also included to enable analysis of how unpaid childcare is distributed across the population.

The sum of unpaid childcare by sex will not equal the sum of unpaid childcare by age for every measurement method except the Minimum wage replacement cost method. The same occupation may have different applicable wage rates, depending on whether the wage rate was taken from the associated age group or the relevant sex of the unpaid child carer.

The Opportunity cost method sees the largest impact of this difference in totals, as it encompasses the highest number of potential occupations for people providing unpaid childcare.

The ABS recommends using the age total over the sex total, as this is created from the finer classification breakdown of five age groups, compared to the sex categories.

For the purposes of comparing monetary estimates of unpaid childcare in this paper with other existing economic measures, the total wages and salaries estimates from the National Accounts are the most conceptually similar.



Feedback

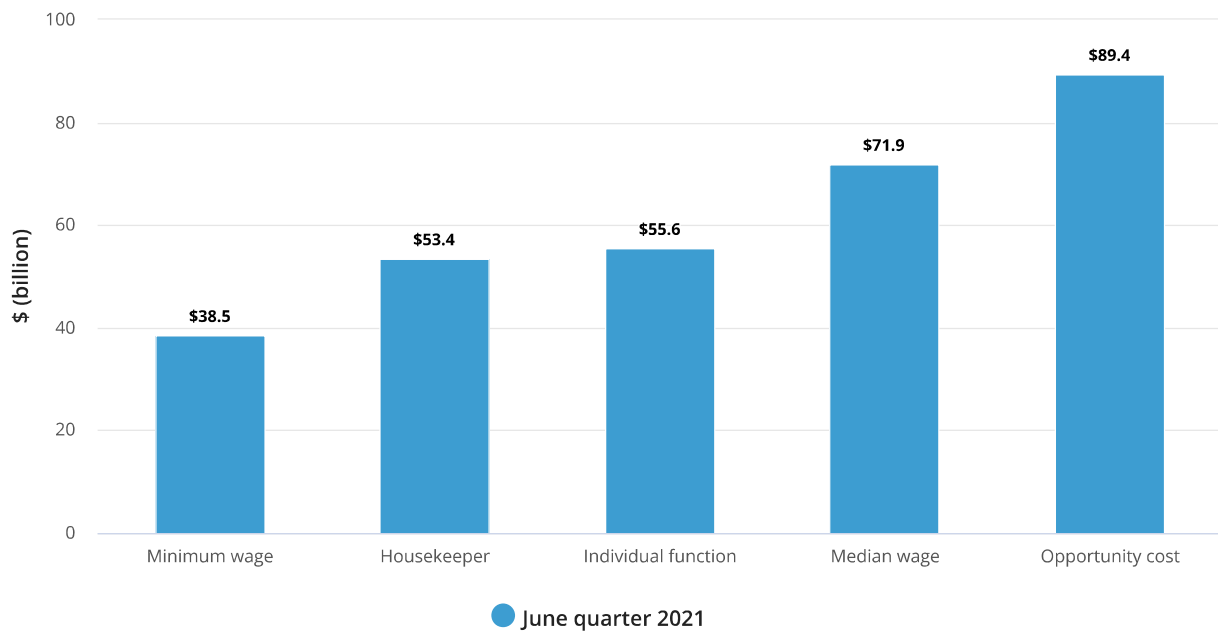
Value of unpaid childcare

In June quarter 2021, the initial experimental estimates of unpaid childcare were:

- Individual function replacement cost method: \$55.6 billion
- Minimum wage replacement cost method: \$38.5 billion
- Housekeeper replacement cost method: \$53.4 billion
- Opportunity cost method: \$89.4 billion

A value derived by applying a median hourly wage rate to all unpaid childcare hours has also been presented for context. This measure is higher than the Individual function replacement cost approach, reflecting that wage rates for occupations most closely aligned to unpaid childcare activities are generally paid below the median wage rate. That is, the value of unpaid care under the Individual replacement approach will be influenced by the relative value of matched paid care-related work.

Monetary value of unpaid childcare, by estimation method



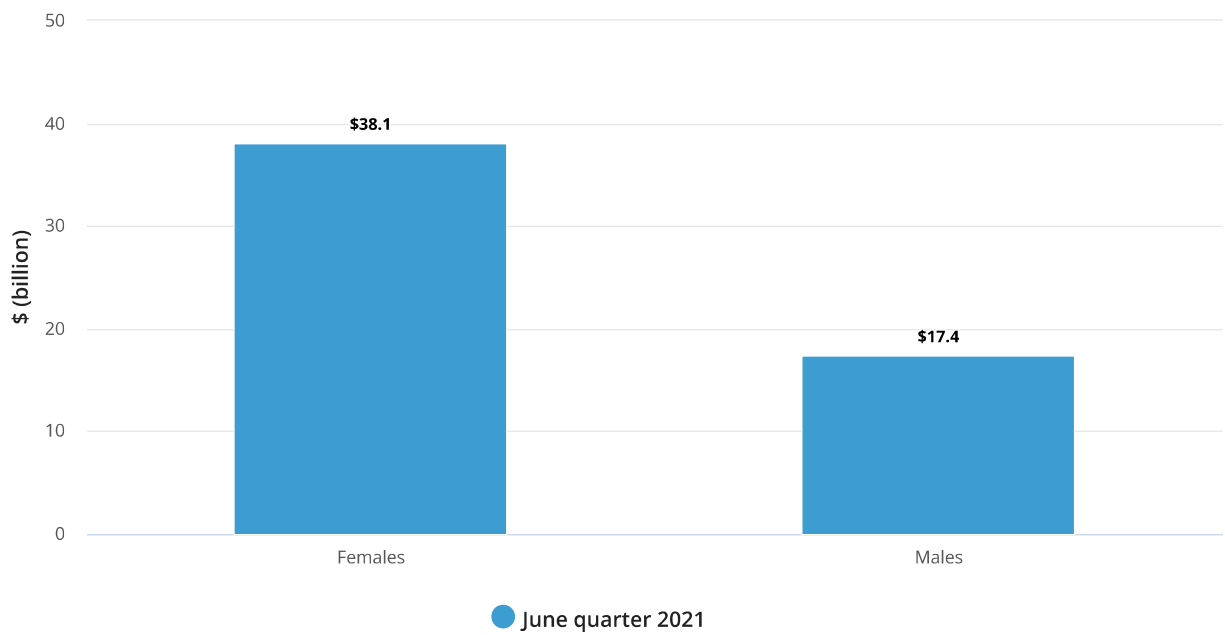
All monetary estimates presented in the remainder of this paper are derived using the Individual function replacement cost method and summed by age groups, unless otherwise specified. An expanded suite of estimates for all methods will be produced in the future.

All estimates are for the June quarter 2021.

Sex

Females contributed \$38.1 billion (68.6%) of unpaid childcare, compared to \$17.4 billion (31.4%) by males.

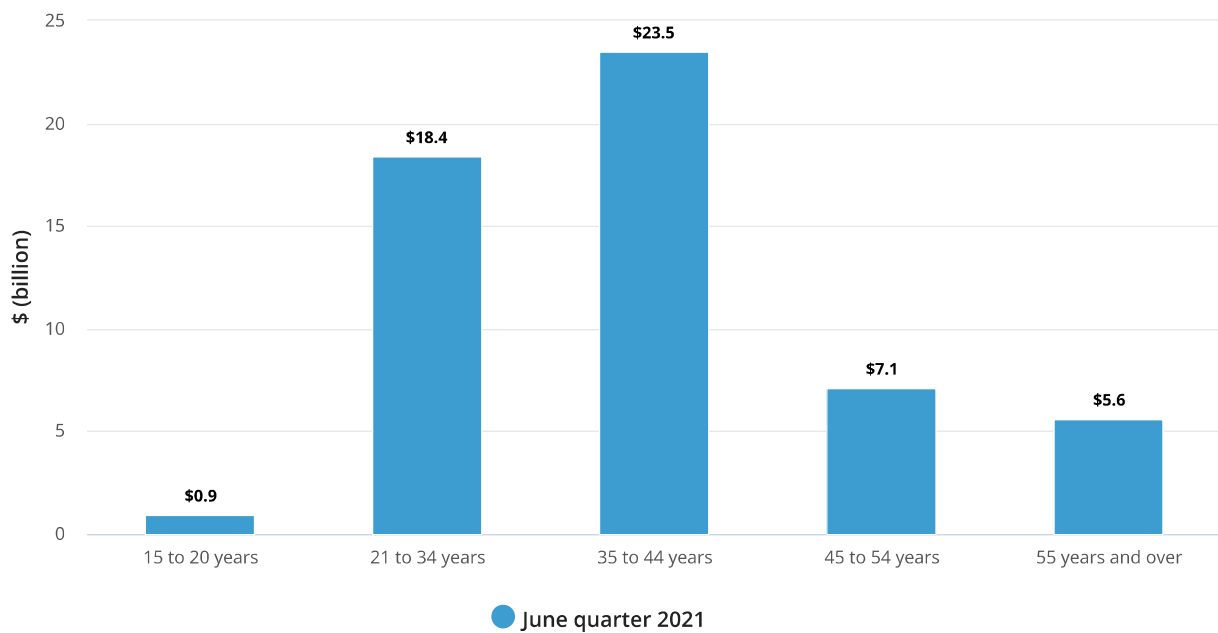
Monetary value of unpaid childcare, by sex of carer



Age

The 35 to 44 and 21 to 34 age groups contributed the most to unpaid childcare, at \$23.5 billion (42.3%) and \$18.4 billion (33.1%). The value of unpaid childcare contributed by the 15 to 20 age group was the smallest, at \$0.9 billion (1.7%).

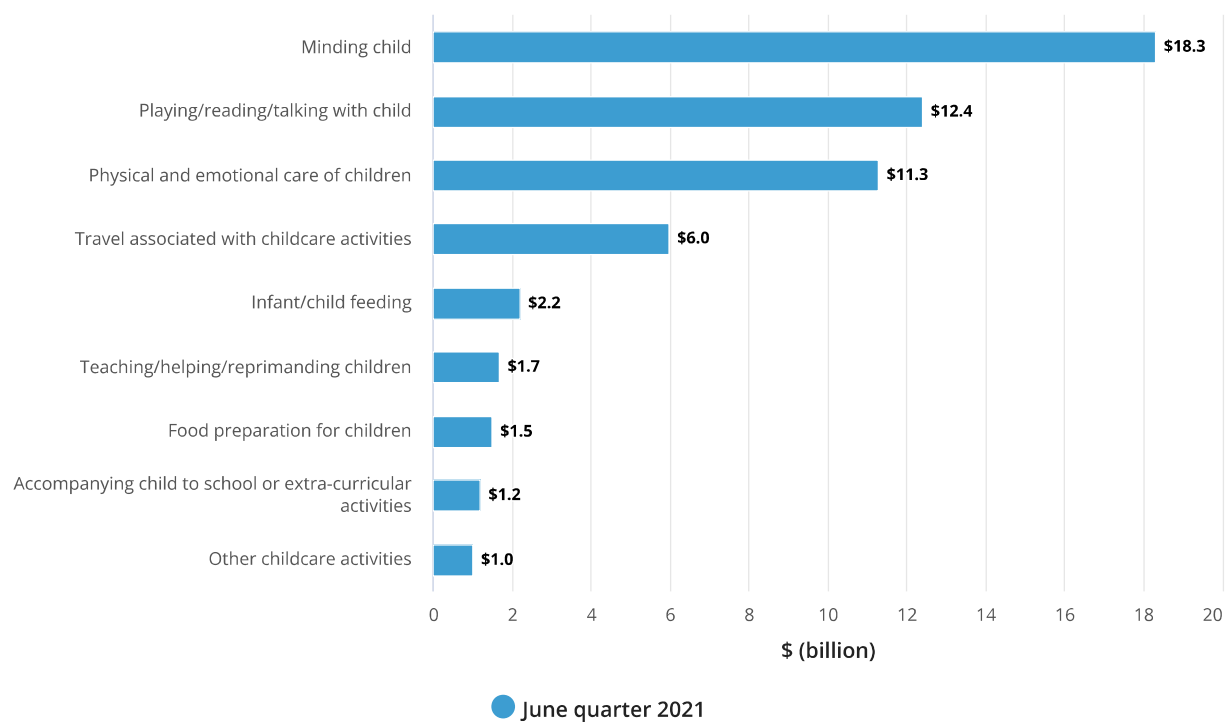
Monetary value of unpaid childcare, by age of carer



Type of childcare activity

The activities with highest monetary value were Minding child and Playing/reading/talking with child, at \$18.3 billion (33.0%) and \$12.4 billion (22.3%).

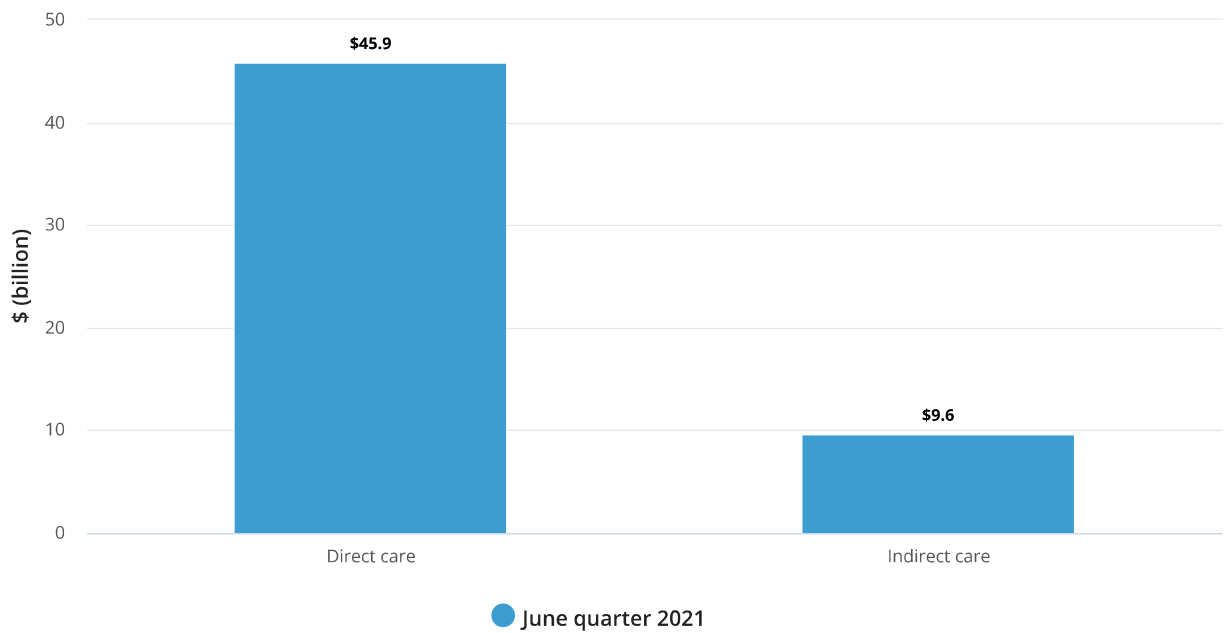
Monetary value of unpaid childcare, by activity



Direct and indirect childcare

Face-to-face direct childcare activities accounted for \$45.9 billion (82.7%) of all unpaid childcare, while supporting indirect childcare activities contributed \$9.6 billion (17.3%).

Monetary value of unpaid childcare, direct and indirect care



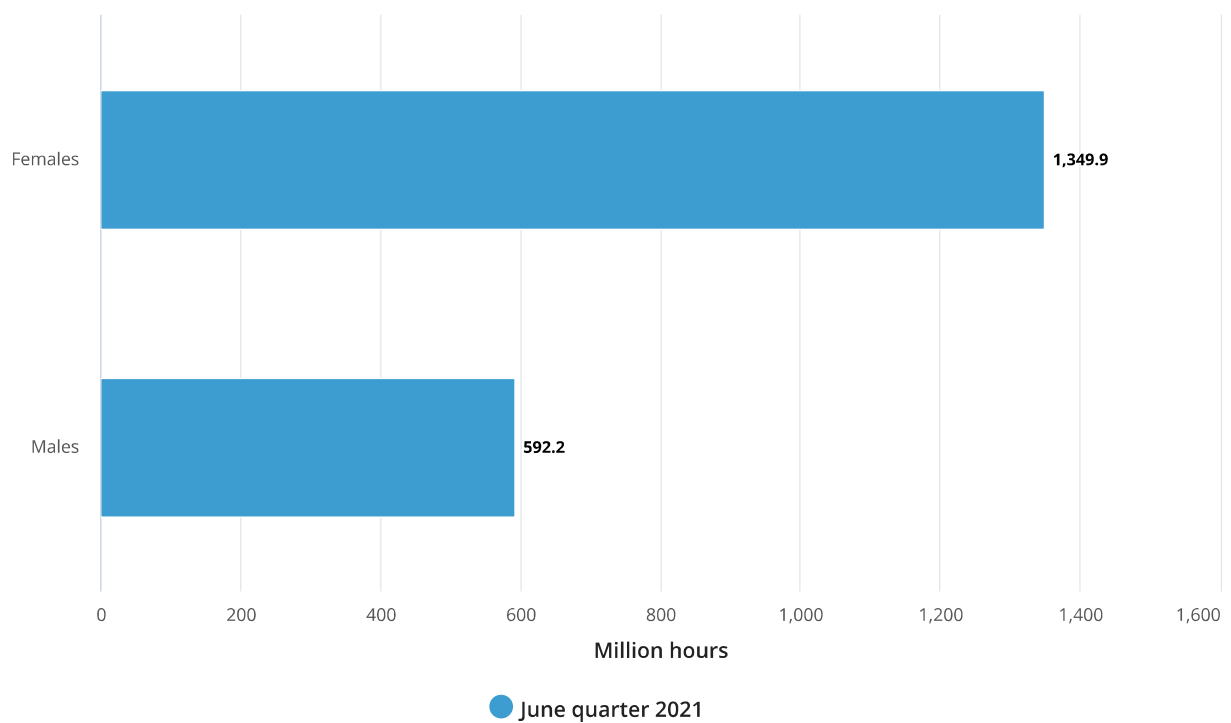
Hours spent on unpaid childcare

The amount of time spent on childcare, in hours, is a vital component in determining the monetary value of unpaid care.

Sex

Females contributed 1,349.9 million hours (69.5%) of unpaid childcare compared to 592.2 million hours (30.5%) for males.

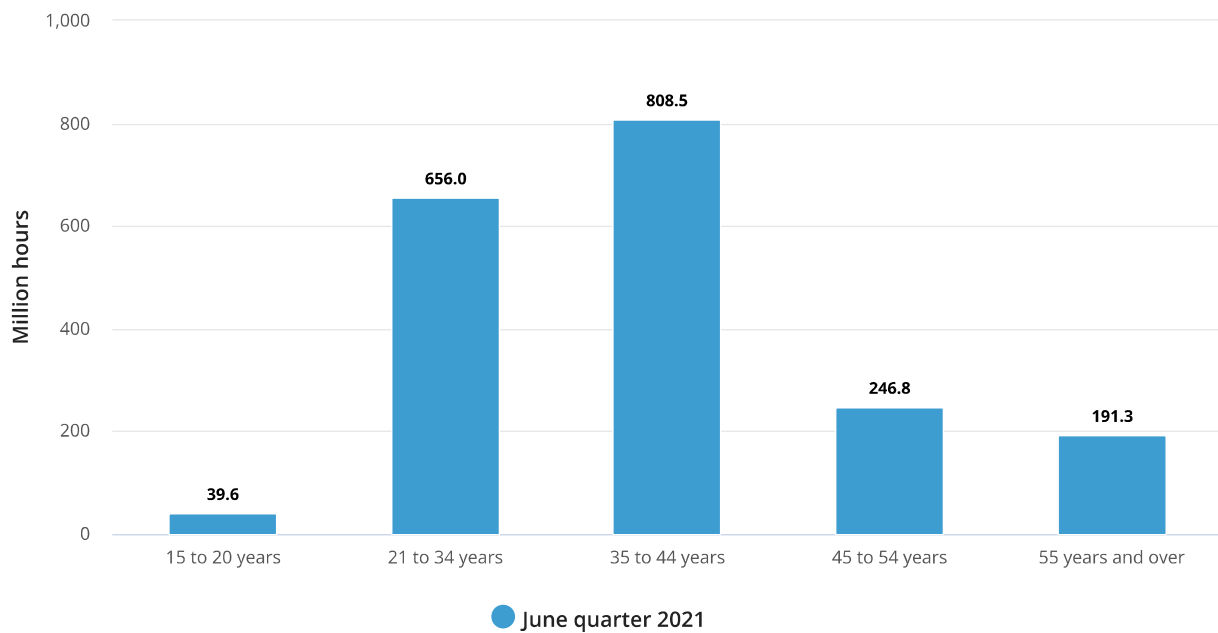
Hours spent on unpaid childcare, by sex of carer



Age

The 35 to 44 and 21 to 34 age groups contributed the most to unpaid childcare, at 808.5 million hours (41.6%) and 656.0 million hours (33.8%). The 15 to 20 age group was the smallest, contributing 39.6 million hours (2.0%).

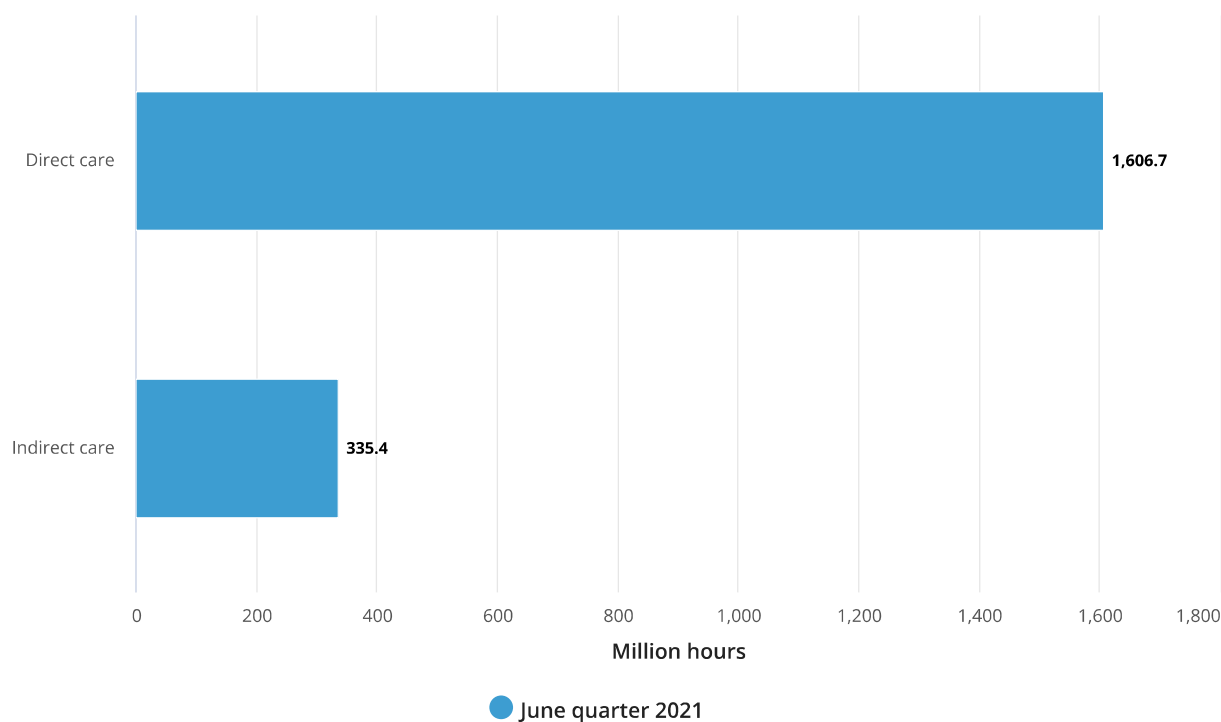
Hours spent on unpaid childcare, by age of carer



Direct and indirect childcare

Face-to-face direct childcare activities accounted for 1,606.7 million hours (82.7%) of all unpaid childcare, while supporting indirect childcare activities contributed 335.4 million hours (17.3%).

Hours spent on unpaid childcare, direct and indirect care



Opportunities for further refinement

The ABS is currently considering a range of factors with a view to maturing our approach to measuring unpaid care in labour statistics over time, in step with developments across the international statistical community.

Children with an ongoing illness or disability

Current estimates from the [Time Use Survey \(https://www.abs.gov.au/statistics/people/people-and-communities/how-australians-use-their-time/2020-21\)](https://www.abs.gov.au/statistics/people/people-and-communities/how-australians-use-their-time/2020-21) do not separately identify care for children facing an ongoing illness or disability. Children in these groups may require higher intensity care, or different types of ongoing care. The ABS will continue to explore options to identify specific care-dependent groups.

Secondary care

The ABS is developing the conceptual interpretation and approach to measuring the value of secondary care, which is collected by the [Time Use Survey \(https://www.abs.gov.au/statistics/people/people-and-communities/how-australians-use-their-time/2020-21\)](https://www.abs.gov.au/statistics/people/people-and-communities/how-australians-use-their-time/2020-21). Secondary activities are collected when a person may be doing two things at one time. For example, a person may be primarily preparing a meal, but also minding children.

For the Individual function replacement cost estimates presented in this paper, secondary childcare activities have been valued at the higher wage rate out of the primary and secondary activity. This approach reflects the cost it would take to replace all activities a carer is undertaking at a point in time. The data sources for secondary care are more limited, however they have been used to account for all unpaid childcare that has occurred.

Adult care

Estimates of adult care have not been included in the data presented in this paper. The ABS is considering the best approach to measuring adult care using available data sources, which do not separately identify all forms of unpaid care for adults.

This particularly affects the measurement of indirect adult care. Caring activities such as emotional and administrative support for adults are known to be under-represented.

Care for adults due to a short-term illness or injury, which are outside the scope of the framework, are also not readily identifiable within existing data.

The ABS plans to investigate potential methods to model this information.

Age groups

The age groupings in this paper were chosen based on the key features of input data sources. For example, adult wage rates are usually for people 21 or over, which cuts across the common five or ten year age groups ending in a four or a nine.

In future the ABS will investigate whether different or finer age groupings would enable better use of unpaid care estimates.

The ABS will also investigate producing broad sex by age estimates to enable cross-classification analysis.

Next steps and release plans

The data in this release is an initial exploratory step for the ABS, which will be further refined and built on in future. An additional information paper will be published in mid-2025 to provide a further update on this work. These new estimates will enable a deeper exploration of the relationship between unpaid care and the paid labour market.

Current estimates are based on data by sex, as available data sources do not all support producing data by gender. In the future, as the availability of [gender-based data \(https://www.abs.gov.au/statistics/standards/standard-sex-gender-variations-sex-characteristics-and-sexual-orientation-variables/latest-release\)](https://www.abs.gov.au/statistics/standards/standard-sex-gender-variations-sex-characteristics-and-sexual-orientation-variables/latest-release) increases, the ABS will investigate producing estimates of unpaid care by gender.

